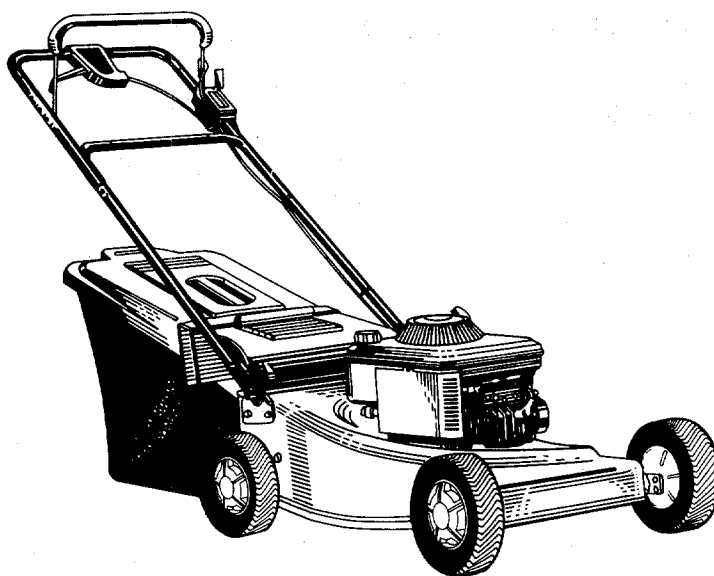


\$1.00

OWNER'S GUIDE

ASSEMBLY • OPERATION • MAINTENANCE • PARTS



(Model 476B Shown)

**21"
ROTARY
MOWERS**

Model Numbers

129-466B000

129-476B000

190-076-000 HARD TOP

190-078-000 SOFT BAG

Important: Read Safety Rules and Instructions Carefully

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Dear Customer,

So often throughout the year we are all in a rush to meet our daily obligations.

However, we at MTD Products Inc are taking a quick moment out to say...

"Thank you for your business."

Sincerely,

MTD PRODUCTS INC



INSTRUCTIONS GIVEN WITH THIS SYMBOL ARE FOR PERSONAL SAFETY. BE SURE TO FOLLOW THEM.

LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, Peerless components, motor, battery (except as noted below) or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

A battery which proves defective within ninety (90) days will be replaced without charge. After 90 days but within one year from the date of purchase, MTD will replace the defective battery for a charge of 1/12 of the current retail price of the battery for each full 30 day period between the date of purchase and the date of return.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

WARNING: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

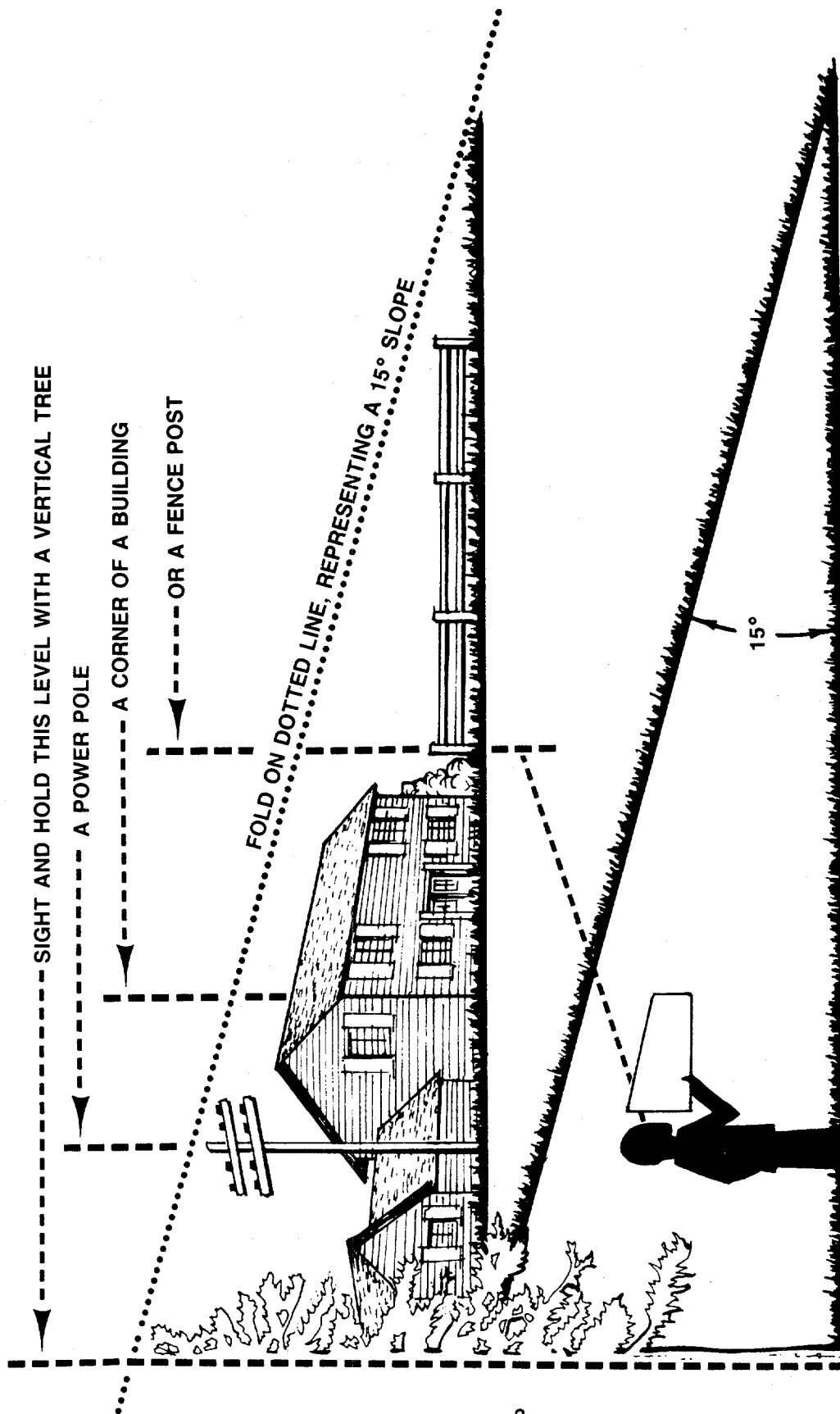
In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer.

Cut Along This Line

USE THIS SHEET AS A GUIDE TO DETERMINE SLOPES WHERE YOU MAY NOT OPERATE SAFELY.

SLOPE GAUGE

(Keep this sheet in a safe place for future reference.)



Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2½ feet every 10 feet). A riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it is extremely difficult to maintain your footing and you could slip, resulting in serious injury.

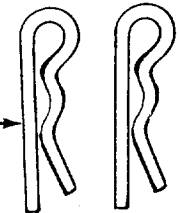
Operate RIDING mowers up and down slopes, never across the face of slopes.
Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes.

CONTENTS OF HARDWARE PACK/PARTS IDENTIFICATION

Remove this sheet from your owner's manual and lay the hardware on the illustration for identification purposes. After assembly, keep the Slope Gauge which is on the reverse side of this sheet for future use.

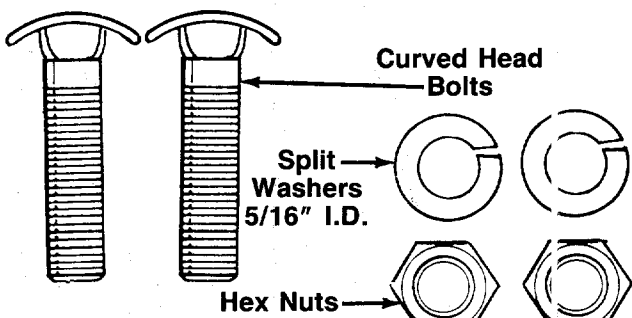
(Hardware pack may contain extra items which are not used on your unit.)

A ATTACHING THE LOWER HANDLE



Hairpin Clips

B ATTACHING THE UPPER HANDLE

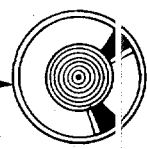


Curved Head Bolts

Split Washers 5/16" I.D.

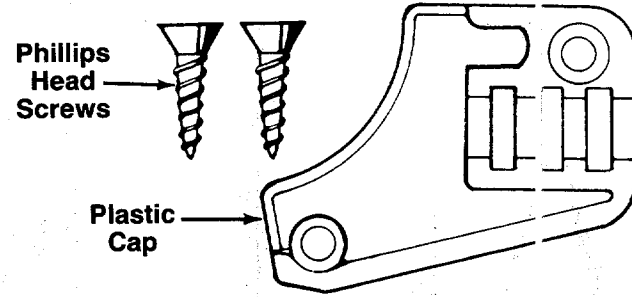
Hex Nuts 5/16-18 Thread

C ATTACHING THE BLADE BRAKE/CLUTCH CABLE



Push Cap

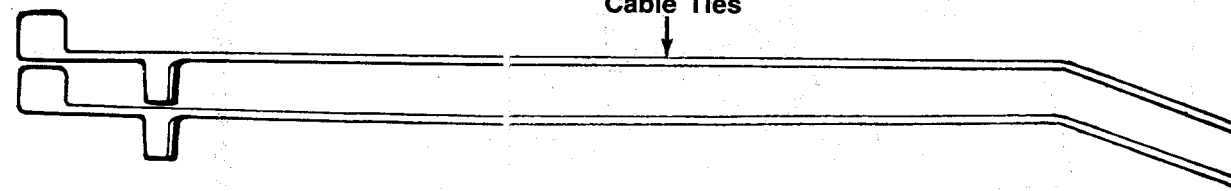
D ATTACHING THE DRIVE CLUTCH CONTROL CABLE



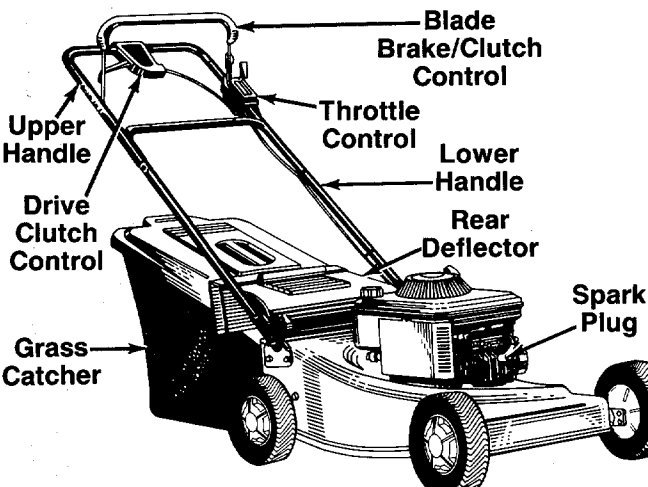
Phillips Head Screws

Plastic Cap

E SECURING THE CABLES



Cable Ties



Upper Handle

Drive Clutch Control

Grass Catcher

Blade Brake/Clutch Control

Throttle Control

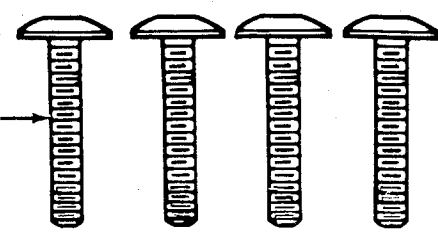
Lower Handle

Rear Deflector

Spark Plug

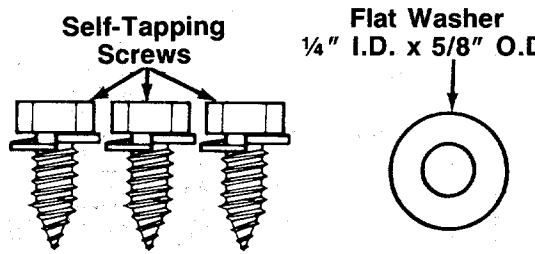
(Model 476B Shown)

F ASSEMBLY OF GRASS CATCHER
Model 466B (Soft Grass Bag):



Self-Tapping Screws

Model 476B (Hardtop Grass Bag):



Self-Tapping Screws

Flat Washer 1/4" I.D. x 5/8" O.D.


Cut Along This Line



IMPORTANT

RULES FOR SAFE OPERATION



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR LAWN MOWER. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL—  **HEED ITS WARNING.**



DANGER

Your lawn mower was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.



TRAINING

1. Read this owner's manual carefully in its entirety before attempting to assemble or operate this machine. Be completely familiar with the controls and the proper use of this machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Your rotary mower is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times.
3. Never allow children to operate a power mower. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
4. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower to help prevent blade contact or thrown object injury. Although the area of operation should be completely cleared of foreign objects, an object may have been overlooked and could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator or any others allowed in the area.



PREPARATION

1. Thoroughly inspect the area where the equipment is to be used. Remove all stones, sticks, wire, bones and other foreign objects which could be picked up and thrown by the mower in any direction and cause serious personal injury to the operator or any others allowed in the area.
2. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair, to protect eyes from foreign objects that may be thrown from the machine in any direction.
3. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
4. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the gasoline tank indoors, while the engine is running, or until engine has been allowed to cool for two minutes after running. Replace gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
5. Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine.
6. The blade control handle is a safety device. Never attempt to bypass its operation. Doing so makes the safety device inoperative and may result in personal injury through contact with the rotating blade. The blade control handle must operate easily in both directions.
7. Never attempt to make a wheel or cutting height adjustment while the engine is running.
8. Never operate the equipment in wet grass. Always be sure of your footing. A slip and fall can cause serious personal injury. Keep a firm hold on the handle and walk, never run. Mow only in daylight or in good artificial light.

9. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.



OPERATION

1. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade can cause injury.
3. Stop the blade when crossing gravel drives, walks or roads.
4. After striking a foreign object, stop the engine, remove the wire from the spark plug, and thoroughly inspect the mower for any damage. Repair the damage before restarting and operating the mower.
5. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
6. Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade continues to rotate for a few seconds after the engine is shut off. Never place any part of the body in the blade area until you are sure the blade has stopped rotating.
7. Before cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the spark plug to prevent accidental starting.
8. Do not run the engine indoors.
9. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes. Always be sure of your footing. A slip and fall can cause serious personal injury.
10. Never operate mower without proper guards, plates or other safety protective devices in place.
11. Do not operate this mower with the chute door open, unless the complete grass catcher is properly mounted on the mower.



MAINTENANCE AND STORAGE

1. Check the blade and engine mounting bolts at frequent intervals for proper tightness.
2. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
3. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
4. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
5. Check the grass catcher bag frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.

Rules for Safe Operation (Continued)

BLADE BRAKE/CLUTCH MAINTENANCE

NOTE: Any required repair work on the blade brake/clutch should be performed by an authorized service dealer. If you cannot locate an authorized service dealer, contact the manufacturer.

1. The blade brake/clutch hand control is a safety device. **Never attempt to bypass its operation.** Doing so makes the safety device inoperative and may result in personal injury through contact with the rotating blade. This hand control must operate freely in both directions.
2. Striking a solid object can cause damage to the blade brake/clutch or to the engine crankshaft. Extensive vibration of the mower during operation is an indication of damage and the unit should be promptly inspected and repaired.

3. A leak in the lower engine crankshaft oil seal could expose the blade brake/clutch friction pads to excess oil resulting in blade or brake slippage, which could increase the stopping time of the blade. Oil collection on the floor beneath the mower during storage may be an indication of an oil seal leak. The unit should be checked by an authorized service dealer.
4. Periodically inspect the inner control cable in the area where it attaches to the hand control. If the cable becomes frayed, it could cause the blade brake/clutch to operate improperly. Also, be careful to avoid pinching the blade brake/clutch control cable when storing the handle.

IMPORTANT: This unit is shipped **WITHOUT GASOLINE** or **OIL**. After assembly, service engine with gasoline and oil as instructed in the separate engine manual packed with your unit.

NOTE: Reference to right or left hand side of the mower is observed from the operating position.

ASSEMBLY INSTRUCTIONS

Tools Required for Assembly

- (1) Pair of Pliers
- (1) 1/2" Wrench*
- (1) 5/16" Wrench or Nutdriver*
- (1) Phillips Screwdriver
- (1) Flat Blade Screwdriver
- *Or one 6" Adjustable Wrench.

UNPACKING

1. Remove the lawn mower from the carton by opening the top flaps and lifting the unit out. Be careful of the staples. Make certain all parts and literature have been removed from the carton before the carton is discarded.
2. Disconnect and ground the spark plug wire against the engine. Check beneath the deck for any cardboard packaging. Remove if present.
3. Stretch out all control cables and place on the floor. Be careful not to bend or kink the cables at any time during assembly.
4. Remove page four from this manual and lay the contents of the hardware pack on the illustration for identification.

ATTACHING THE LOWER HANDLE (Hardware A)

1. Attach the lower handle by placing the bottom holes in the lower handle over the weld pins on the handle mounting brackets on the rear of the deck. Make certain the instruction label on the lower handle can be read from the operating position.
2. Using a pair of pliers, squeeze one leg of the lower handle against the handle mounting bracket. Insert the hairpin clip into the **inner** hole on the weld pin. See figure 1. Repeat on other side.

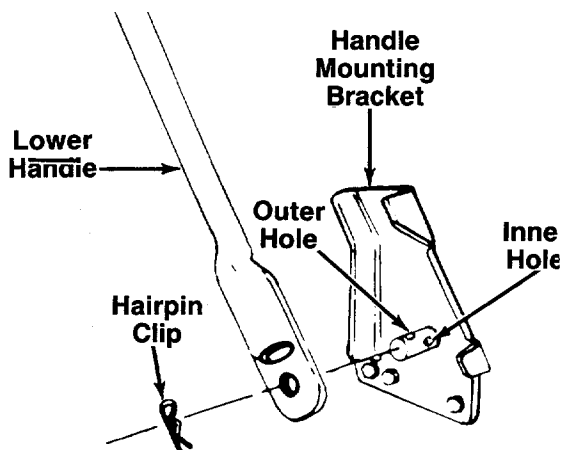


FIGURE 1.

NOTE

There are two (2) holes in the handle mounting brackets. Place the hairpin clip in the inner hole for operation. Outer hole is for storage.

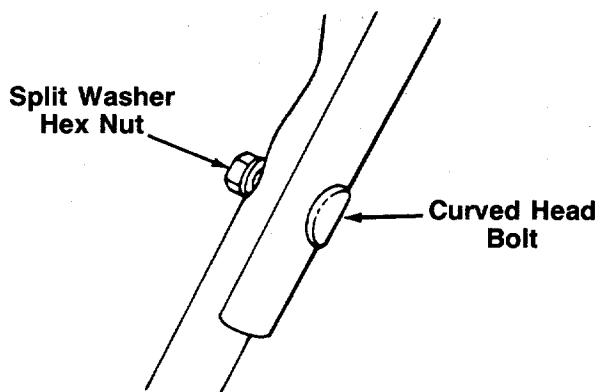


FIGURE 2.

ATTACHING THE UPPER HANDLE (Hardware B)

Place the upper handle in position over the lower handle. The label on the throttle control housing and the control lever must be facing up.

Secure upper handle using the curved head bolts, split washers and hex nuts as shown in figure 2.

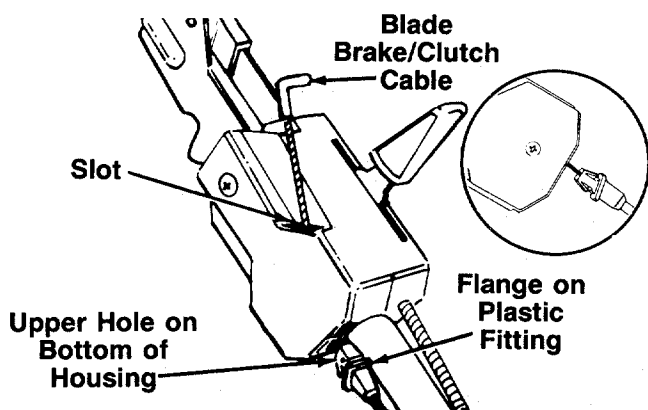


FIGURE 3.

ATTACHING THE BLADE BRAKE/CLUTCH CABLE (Hardware C)

The blade brake/clutch cable is the cable which has an "L" fitting on the loose end, and is attached to the blade brake/clutch underneath the deck.

1. Route the blade brake/clutch cable under the lower handle and inside the handle mounting bracket. Place end of cable into the upper hole on the bottom of the control housing, and through the slot on the side of the housing as shown. The angle of the plastic flange must be positioned downward as shown in figure 3. Be careful not to bend or kink the cable at any time.
2. Push the plastic fitting until it locks into the control housing.



WARNING

The cable must be assembled as shown for proper blade brake/clutch operation.

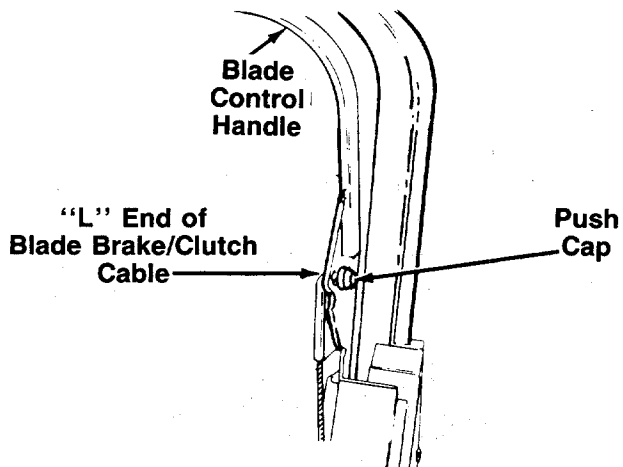


FIGURE 4.

3. Insert the "L" end of the blade brake/clutch cable into the hole in the blade brake/clutch control handle, from the inside to the outside as shown in figure 4. Hold the end of the cable, and press push cap on by hand.

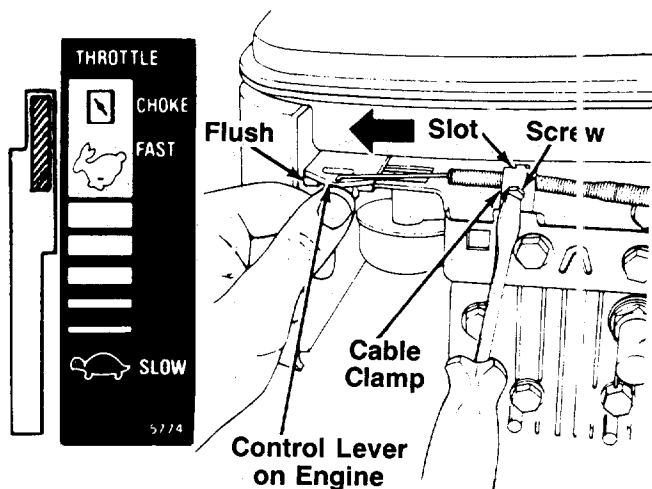


FIGURE 5.

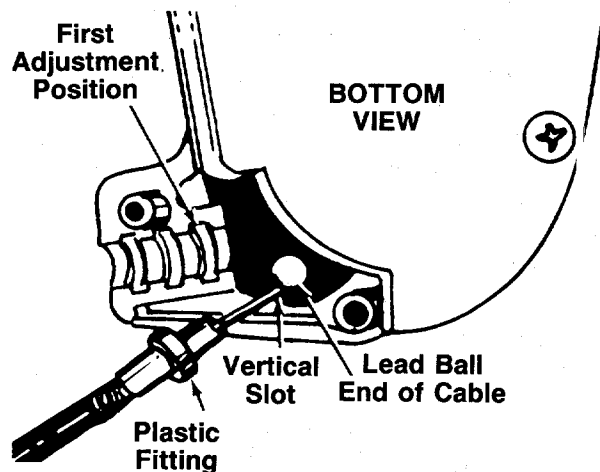


FIGURE 6.

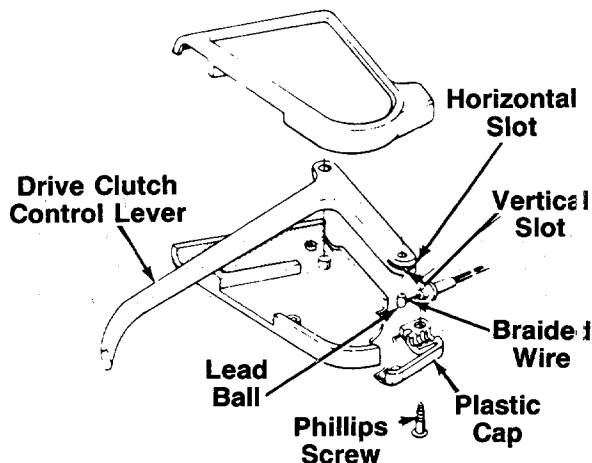


FIGURE 7.

ATTACHING THE THROTTLE CABLE

1. Push the throttle control lever on the handle all the way forward to **CHOKE** position. See figure 5.
2. The throttle control cable is attached to the upper handle. Route the throttle control cable under the lower handle and inside the handle mounting bracket. Hook the "Z" end of the throttle control cable into the hole in the control lever on the engine. See figure 5.
3. Using a 5/16" wrench or nutdriver, remove the screw on the cable clamp shown in figure 5. Slip the control cable under the clamp. Replace the screw (cable should be above the screw), but do not tighten (cable must still move freely beneath the clamp). Make certain the tab on the cable clamp is seated into the slot on the engine.
4. Push the control lever on the engine as far toward the **outside** of the engine as it will go. The edge of the control lever should be flush with the bracket on the engine. See figure 5. Hold the control lever in this position as you tighten the screw on the cable clamp to secure the throttle cable.
5. Loosen the screw on the clamp on the side of the engine. Slip the cable casing under the clamp to secure the cable **away from the muffler**. Be careful not to bend or kink the cable. Tighten the screw.

← ATTACHING THE DRIVE CLUTCH CONTROL CABLE (Hardware D)

The drive clutch control cable is attached to the deck. Attach the cable to the lever in the clutch control housing, located in the middle of the upper handle, as follows.

1. Place the lead ball end of the cable into the fitting provided in the end of the clutch control lever. Slip the braided wire into the vertical slot as shown in figure 6.
2. Slide the braided wire around in the horizontal slot. See figure 7.
3. Place the plastic fitting on the control cable into the first adjustment position in the clutch control housing. See figure 6.
4. Secure the plastic cap to the clutch control housing using the two Phillips head screws. See figure 7.



WARNING

Drive clutch adjustment must be checked before the unit is operated, as described in the operation section.

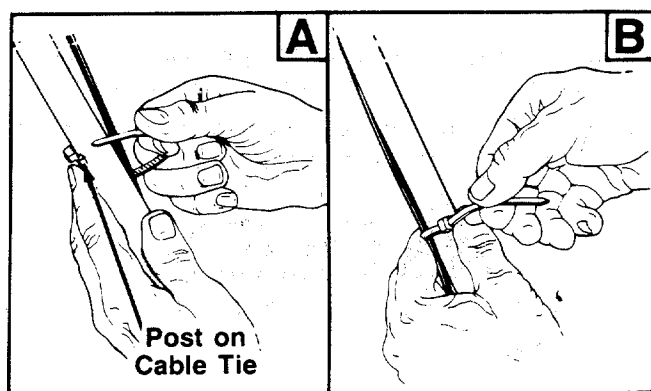


FIGURE 8.

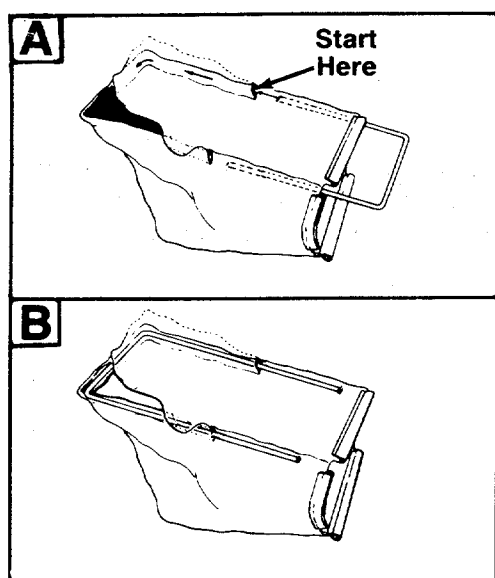


FIGURE 9.

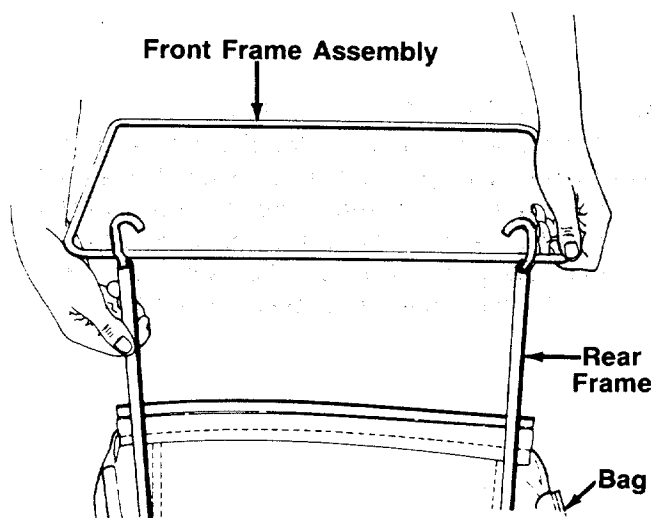


FIGURE 10.

SECURING THE CABLES (Hardware E)

Secure all cables to the left side of the handle as follows.

- A. Insert posts on cable ties into holes provided on the lower handle. The holes may be either on the inside or outside of the handles. See figure 8A.
- B. Secure the cables with the cable ties. See figure 8B.
- C. Trim excess ends of cable ties.

FINAL ASSEMBLY OF MOWER

1. Attach hub caps (optional) to the wheels by lining up the tabs on the hub caps with the holes in the wheels. Push to lock in position.
2. Make certain all nuts and bolts are tightened securely.

ASSEMBLY OF GRASS CATCHER (Hardware F)

There are two different types of grass catchers, those with soft grass bags and those with hardtop grass bags. Follow the instructions which pertain to your unit.

NOTE

Make certain the grass bag is turned right side out before assembling (warning label will be on the outside).

Model 466B (Soft Grass Bag):

1. Place the end of the rear frame inside the grass catcher bag. See figure 9A.
2. Insert one end of the frame into the cloth channel inside the grass catcher bag. Feed all the material on one side of the frame before working it around the frame.

When this step is completed, both ends of the frame should be inside the bag. See figure 9B.

3. Join the rear frame and front frame assembly as shown in figure 10.

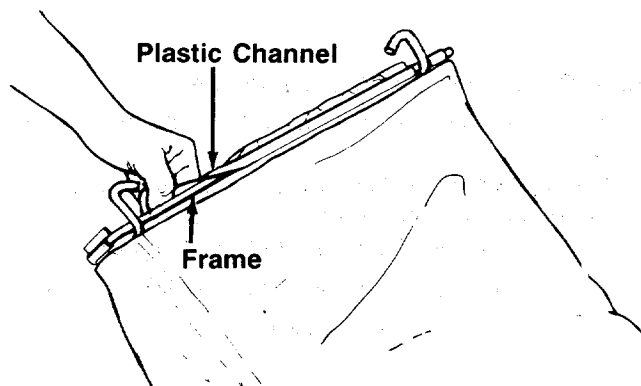


FIGURE 11.

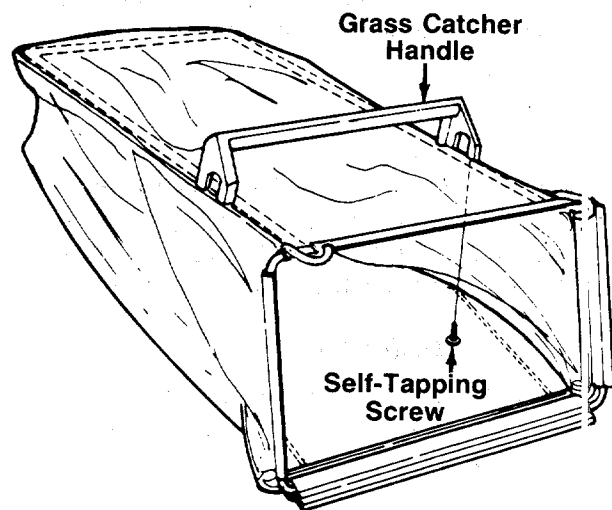


FIGURE 12.

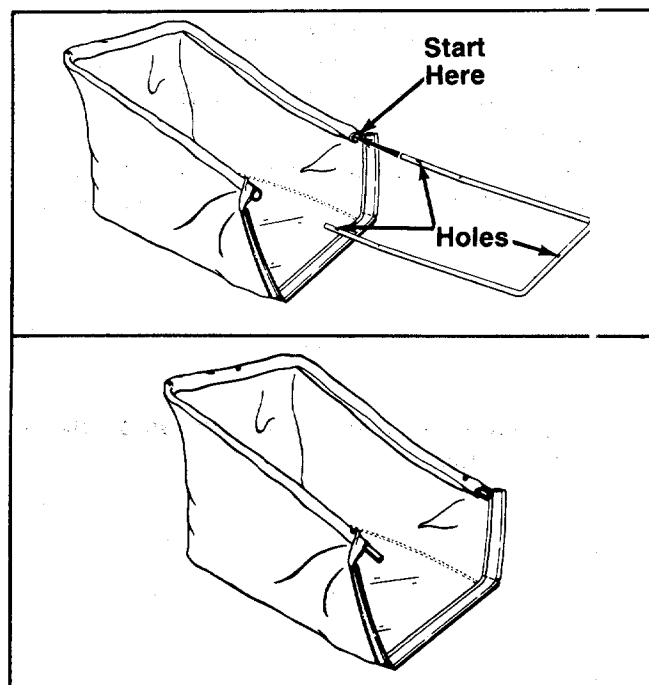


FIGURE 13.

4. Secure front of bag to frame by working the plastic channels on bag over frame. See figure 11.

5. Close the top of the bag by stretching the loose material over the end of the frame.



WARNING

Never operate the mower with the bag open.

6. Place the grass catcher handle in position on top of the grass bag and frame as shown in figure 12. Secure with four self-tapping screws.

Model 476B (Hardtop Grass Bag):

1. There are three holes in the rear frame. With the holes on the upper side as shown in figure 13. Insert one end of the rear frame into the cloth channel on the edge of the grass catcher bag. Feed all the material on one side of the frame before working it around the frame. See figure 13.

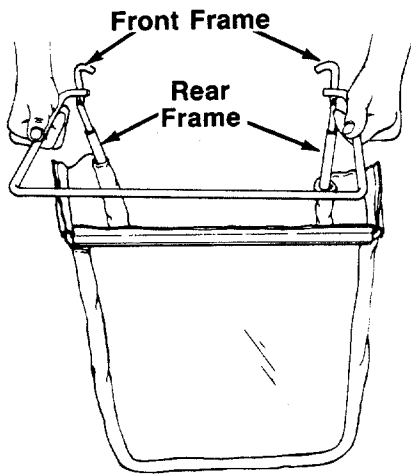


FIGURE 14.

2. Slide the ends of the front frame assembly into the ends of the rear frame as shown in figure 14.

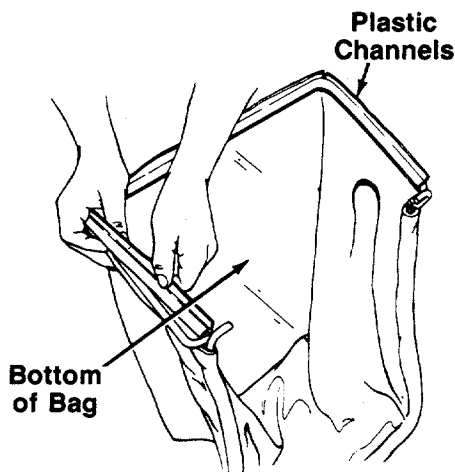


FIGURE 15.

3. Secure front of bag to front frame by slipping plastic channels on sides and bottom of bag over frame. See figure 15.

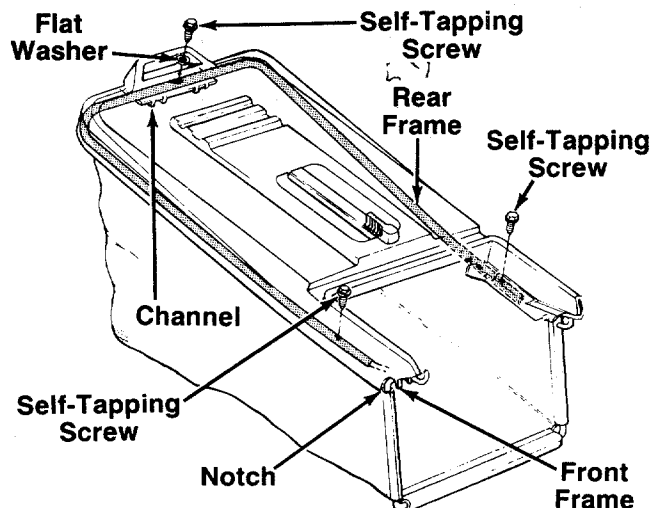


FIGURE 16.

4. Attach the hardtop cover to the grass catcher as follows. See figure 16.
- Place the cover in position on top of the grass catcher. Press the rear frame into the channel on the rear of the cover (beneath the rear handle).
 - Slide the notches on the sides of the cover over the front catcher frame.
 - Attach rear of cover to frame using the flat washer and one self-tapping screw as shown in figure 16. Attach the sides of the cover to frame with the other two self-tapping screws.

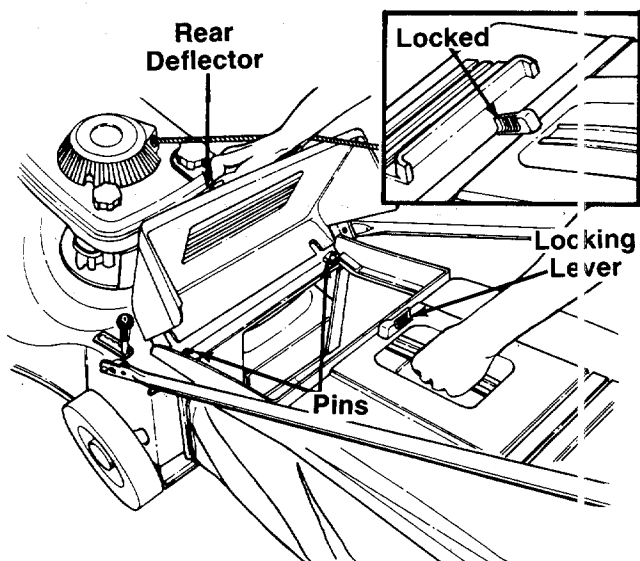


FIGURE 17.

ATTACHING BAG TO MOWER

Lift the rear deflector on the mower. Place the hooks on the grass catcher over the pins on the back of the mower. See figure 17. Release the rear deflector. Turn the locking lever to the locked position to secure the rear deflector. See figure 17, inset.

To remove the grass catcher, turn the locking lever to the unlocked position and lift the rear deflector on the mower. Lift the grass catcher up, over the pins on the back of the mower. Release the deflector.

CONTROLS

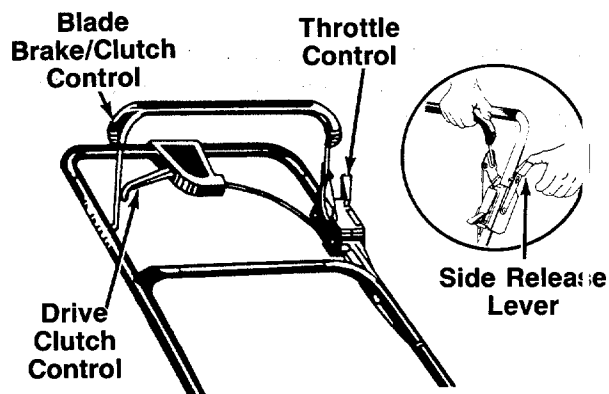


FIGURE 18.

THROTTLE CONTROL

The throttle control is located on the side of the upper handle. It is used to regulate the engine speed.

DRIVE CLUTCH CONTROL

Squeezing the drive clutch control engages the drive mechanism to the rear wheels. Releasing the clutch control stops the rear wheels from driving. Release the drive clutch control to slow down when negotiating an obstacle, making a turn or stopping. See figure 18.

BLADE BRAKE/CLUTCH CONTROL

The blade brake/clutch control is located on the upper handle of the mower. The blade brake/clutch handle engages and disengages the blade.

To engage the blade, pull the side release lever away from the unit. See figure 18. Pull the blade brake/clutch control handle against the upper handle. Release side lever.

Release the blade brake/clutch control handle to stop the blade from turning.

OPERATION



FIGURE 19.

Keep hands and feet away from the chute area on cutting deck. See figure 19.

WARNING
THIS CONTROL MECHANISM IS A
SAFETY DEVICE NEVER ATTEMPT
TO BYPASS ITS OPERATIONS

→ NOTE

For shipping purposes your mower is set with the wheels in a low cutting height position. For best results raise the cutting position until it is determined which height is best for your lawn. See cutting height adjustment section.

GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual packed with your mower. **Read instructions carefully.**



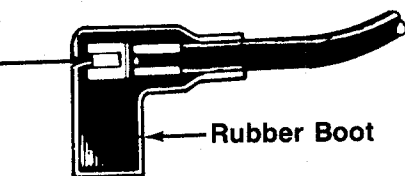
WARNING

Never fill fuel tank indoors, with engine running or until the engine has been allowed to cool for at least two minutes after running.

BEFORE STARTING

1. Attach spark plug wire to spark plug. Make certain the metal loop on the end of the spark plug wire (inside the rubber boot) is fastened securely over the metal tip on the spark plug. See figure 20.

Metal Loop
on Spark
Plug Wire



Rubber Boot

FIGURE 20.

2. Open fuel shut-off valve. See figure 21.

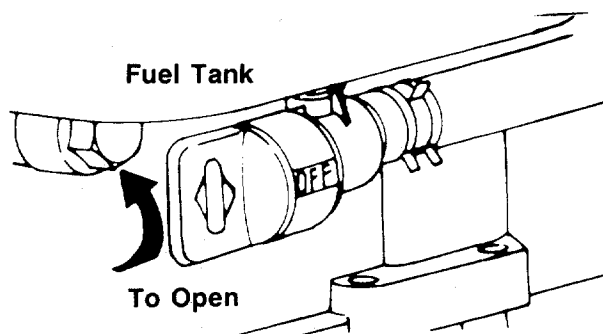


FIGURE 21.

3. Before each use, check for proper drive clutch operation by performing the following before starting the engine:

With the drive clutch control released, push mower forward. It should move freely. **Pull mower backward. It should move freely.**

If it does not and the rear wheels tend to lock up, the clutch may not be releasing completely. Do not start the engine until corrections have been made. Check the control cable for severe bend, kinks and binding, or grass build-up in the pulley groove. Correct and adjust as required.

TO START ENGINE



WARNING

When starting the unit for the first time, face the mower against a solid object such as a wall, fence, etc. Start the unit, and if it shows any signs of motion with the drive clutch control disengaged, shut the engine off immediately. Check the position of the drive clutch control cable. The plastic fitting must be assembled in the first adjustment position inside the housing, all the way to the right, as shown in figure 6.

1. Move throttle control lever to CHOKE position. (A warm engine may not require choking.)
2. With the blade brake/clutch handle **released**, crank engine by pulling recoil starter with a quick firm pull. Do not pull out so far that rope stops with a jerk as this will cause rope failure. Do not allow rope and handle to snap back into place.
3. After engine starts, move throttle control to desired engine speed. (Move the throttle control lever at least halfway back, then forward to obtain FAST position.)

→ NOTE

If any problems are encountered, refer to the Trouble Shooting Guide on page 25.

TO STOP ENGINE

1. Move throttle control lever to STOP position.
2. Disconnect the spark plug wire and ground it against the engine to prevent accidental starting while equipment is unattended.

TO ENGAGE THE BLADE

1. Start engine as instructed previously. Allow the engine to warm up for **one minute** before attempting to engage the blade.

2. To engage the blade, pull the side release lever away from the unit. Pull the blade brake/clutch control handle down against the upper handle. Release the side lever. See figure 18.

NOTE

If a warm engine falters or stalls when attempting to engage the blade, refer to Carburetor Adjustment Section of this owner's manual.

3. Release the blade brake/clutch control handle to stop the blade from turning.

NOTE

Always release the blade brake/clutch control handle before stopping the engine. If the engine begins to stall, release the blade brake/clutch control handle immediately.

Should the engine stall with the blade brake/clutch control in the operating position (control handle **not** released), difficulty may be encountered in pulling the starter rope to restart the engine. Proceed as follows.

1. Disconnect the spark plug wire from the spark plug.
2. Move the throttle lever to STOP position.
3. Hold the blade brake/clutch control in the engaged position.
4. While holding the blade brake/clutch control handle in this position, pull the starter rope.
5. As the starter rope is being pulled, release the blade brake/clutch control handle.

The starter rope should now operate correctly. Reconnect the spark plug wire for normal operation.

USING YOUR ROTARY MOWER



Never operate your unit without either the rear deflector or entire grass catcher assembly in place.

Be sure that lawn is clear of stones, sticks, wire, or other objects which could damage lawn mower or engine. Such objects could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator and others.

For the best results, do not cut wet grass because it tends to stick to the underside of the mower, preventing proper discharge of grass clippings, and could cause you to slip and fall. New grass, thick grass or wet grass may require a narrower cut. Blade speed should be adjusted to the condition of the lawn.

For best results, cut off one-third or less of the total length of the grass. Lawn should be cut in the fall as long as there is growth.

This mower is designed to be operated at full throttle to give you the best cut and do the most effective job of bagging the cut grass.

IMPORTANT

If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

Striking a solid object can cause damage to the blade brake/clutch or to the engine crankshaft. Extensive vibration of the mower during operation is an indication of damage. The unit should be promptly inspected and repaired.

ADJUSTMENTS



Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

CUTTING HEIGHT ADJUSTMENT

The height adjustment handle is located on the left side of the deck. The handle may be placed in one of nine cutting height positions. Push the handle to the left and then either forward to lower the cutting height or backward to raise the cutting height. See figure 22.

For rough or uneven lawns, move the height adjustment handle to a position which will give a higher cutting height.

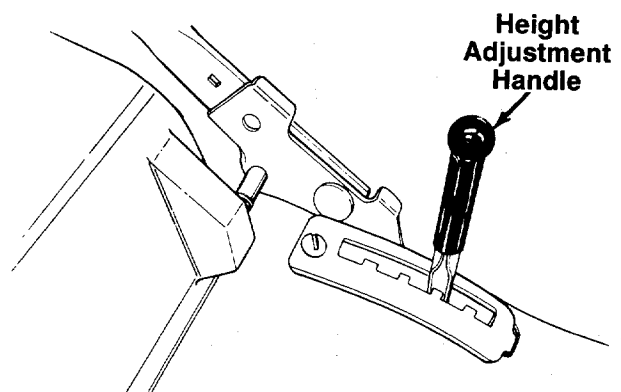


FIGURE 22.

THROTTLE

The throttle control wire assembly can be adjusted if necessary. Loosen the screw on the cable clamp shown in figure 5. Adjust as instructed in steps 1 and 4 of "Attaching the Throttle Control Cable" in Assembly Instructions.

CARBURETOR ADJUSTMENTS



WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustments may be required to compensate for differences in fuel, temperature, altitude and load. To adjust carburetor, refer to the separate engine manual.



NOTE

If a warm engine falters or stalls when attempting to engage the blade, the carburetor mixture should be adjusted 1/8 turn richer (counterclockwise). See figure 23.

The carburetor should be adjusted with the air cleaner in place and the blade control handle in the blade disengaged position.



NOTE

A dirty air cleaner will cause an engine to run rough. Be certain air cleaner is clean and attached to the carburetor before adjusting carburetor.

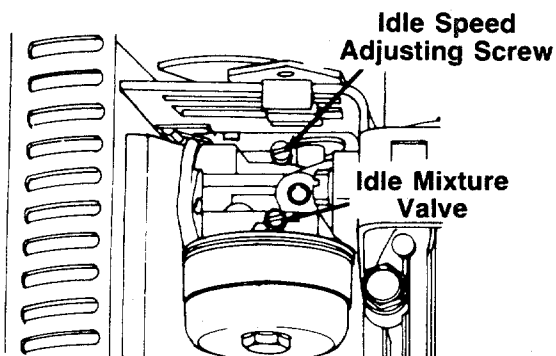


FIGURE 23.

DRIVE CLUTCH CONTROL ADJUSTMENT

If the unit does not self-propel with the drive clutch control engaged, remove the plastic cap from beneath the drive clutch control housing. Move the plastic fitting on the control cable to the next adjustment position on the left. Reassemble the plastic cap and retest. See figure 24.

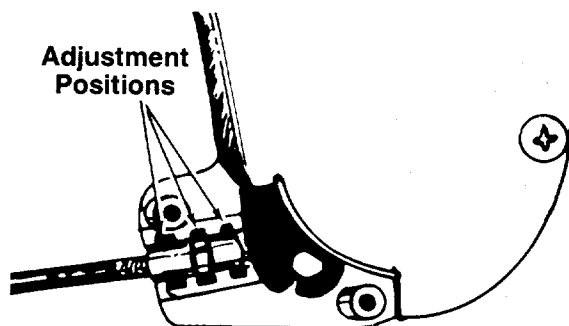


FIGURE 24.

LUBRICATION



WARNING

Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn mower.

Blade Brake/Clutch Control—Lubricate the pivot points on the blade control handle and the cable at least once a season with light oil. The control must operate freely in both directions.

Discharge Chute Deflector—The torsion spring and pivot point should be lubricated periodically with light oil to prevent any rust or binding. Deflector must work freely.

Wheels—Lubricate the wheel bearings at least once a season with light oil. Also, if the wheels are removed for any reason, lubricate the surface of the axle bolt and the inner surface of the wheel with light oil. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

Throttle—Periodically lubricate throttle control lever and throttle wire assembly with a few drops of light oil for ease of operation.

Transmission—The transmission is pre-lubricated and sealed at the factory. It does not require checking. If disassembled for any reason, fill with 2 ounces of Alvania grease, part number 737-0168.

MAINTENANCE



WARNING

Be sure to disconnect and ground the spark plug wire before performing any repairs or maintenance.



NOTE

When tipping the unit, empty the fuel tank and keep engine spark plug side up.

TROUBLE SHOOTING

Refer to page 25 of this manual for trouble shooting information.

CUTTING BLADE

When removing the cutting blade for sharpening or replacement, protect hands by using heavy gloves or a rag to grasp the cutting blade. Remove the two hex nuts and lock washers which hold the blade to the blade brake/clutch. See figure 25.

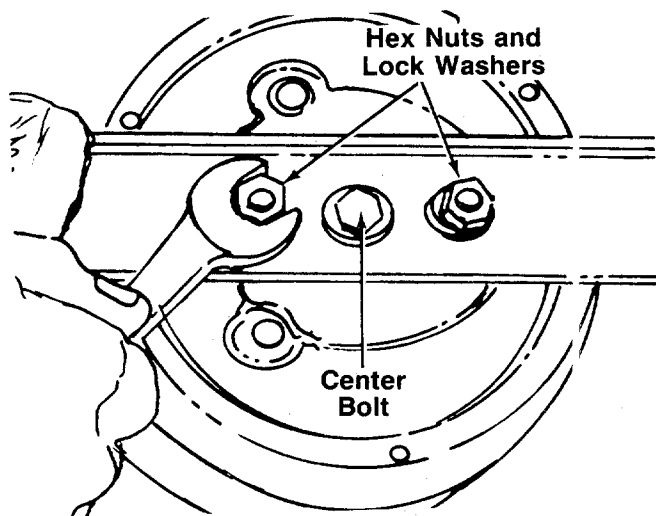


FIGURE 25.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position.

Blade Mounting Torque

Make certain that the center bolt which secures the blade brake/clutch and the two hex nuts which secure the blade are tightened to between 350 inch pounds (minimum) and 600 inch pounds (maximum).

To insure safe operation of your unit, **all** nuts and bolts must be checked periodically for correct tightness.

DECK

The underside of mower deck should be cleaned after each use to prevent a buildup of grass clippings, leaves, dirt or other matter. If this debris is allowed to accumulate, it will invite rust and corrosion, and may cause an uneven discharge of grass clippings at the next cutting.

The deck may be cleaned by tilting the mower and scraping clean with a suitable tool (make certain the spark plug wire is disconnected).



NOTE

Do not use water to clean the underside of the deck as damage to the blade brake/clutch could result.

ENGINE

Refer to the separate engine manual for all engine maintenance instructions.

Maintain **engine oil** as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.

Service **air cleaner** every 25 hours under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced. To service the air cleaner, refer to the separate engine manual packed with your unit.

The **spark plug** should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specifications.

Clean the engine regularly with a cloth or brush. Keep the cooling system (blower housing area) clean to permit proper air circulation which is essential to engine performance and life. Be certain to remove all grass, dirt and combustible debris from muffler area.

BLADE BRAKE/CLUTCH

This unit is equipped with a blade brake/clutch. If for some reason the blade brake/clutch becomes inoperative, it is suggested that all repair work on the blade brake/clutch should be performed by an authorized service dealer. The unit should be inspected by an authorized service dealer if any of the following conditions are noticed.

1. Frayed clutch control cable.
2. Leaking oil seal (oil collection on the floor during mower storage).
3. Extensive vibration of the unit.

BELT REMOVAL AND REPLACEMENT

1. Disconnect the spark plug wire and ground it against the engine.
2. Drain the fuel tank or place a piece of plastic beneath the cap to prevent gasoline leakage.
3. Remove the grass bag.
4. Hold the rear deflector up as you tip the mower back on its handle. Block securely.
5. Remove the blade by removing two hex nuts and lock washers. Refer to figure 25.

NOTE

When reassembling, tighten hex nuts to between 350 and 600 in. lbs.

6. Remove the center bolt as follows.
 - a. Insert a screwdriver into the slot provided in the blade brake/clutch housing where the control cable enters the housing. See figure 26.
 - b. Place a 5/8" wrench on the center bolt. Turn the wrench slowly until the screwdriver catches in a groove provided inside the clutch. The screwdriver will now keep the clutch from turning, and the center bolt and cupped washer may be removed. Lift off lower housing.

IMPORTANT

Upon reassembly, be certain to tighten center bolt to between 350 and 600 in. lbs.

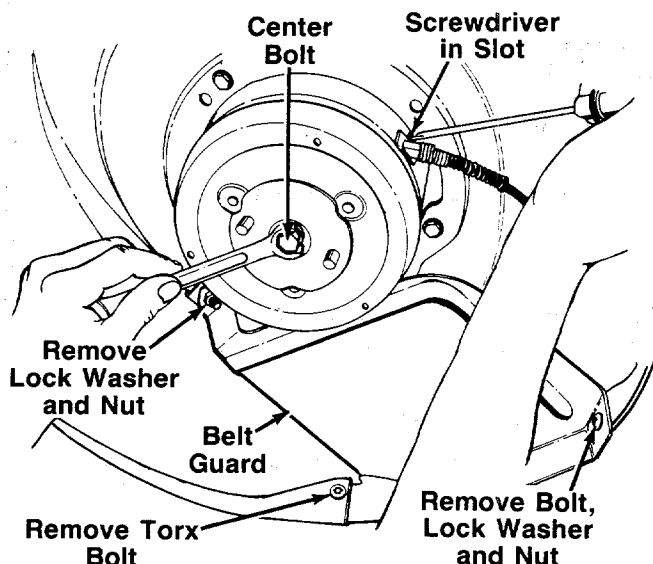


FIGURE 26.

7. Remove the belt from the engine crankshaft.

NOTE

Other parts may come off the crankshaft when the housing is removed. When reassembling, if the upper pulley half has come off the crankshaft, be certain to assemble one thin spacer and two wave washers above the upper pulley half. Make certain the thick spacer is in place between the two pulley halves. See reference numbers 69, 70 and 71 on page 20.

8. Remove belt guard by removing the lock washer and hex nut shown in figure 26. Then remove one Torx bolt, using a #27 Torx driver. A 9/64" Allen wrench may also be used. Then remove one bolt, lock washer and nut as shown.
9. Remove belt from around transmission pulley. Remove the belt from between the idler pulley and belt guard shown in figure 27.

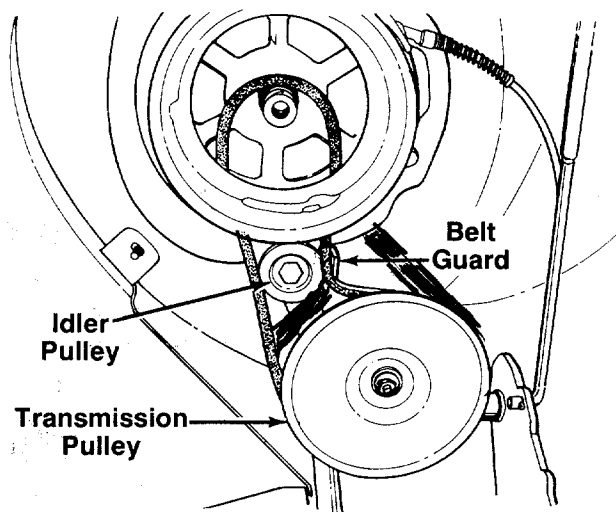


FIGURE 27.

10. Assemble new belt, following instructions in reverse order.

NOTE

When reassembling the lower housing, it is necessary to engage the blade brake/clutch control handle (squeeze it against upper handle).

OFF-SEASON STORAGE

The following steps should be taken to prepare lawn mower for storage.

1. Clean and lubricate mower thoroughly as described in the lubrication instructions.
2. Refer to engine manual for correct engine storage instructions.
3. Coat mower's cutting blade with chassis grease to prevent rusting.
4. Store mower in a dry, clean area.

NOTE

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially cables and all moving parts.

HANDLE STORAGE

The handle may be placed in an upright position for storage. Move hairpin clips to outer hole on weld pins. See figure 1. Press inward on the bottom of the lower handle and push forward. The handle will lock in this position. Reverse this procedure to place the handle in the operating position.

NOTE

The use of any accessory on this Rotary Mower other than those manufactured by the mower manufacturer is **not** recommended.



WARNING

1. DO NOT operate the mower without the entire grass catcher or chute deflector in place.
2. DO NOT operate the mower without the protective shield on the rear of the deck in place.

NOTE

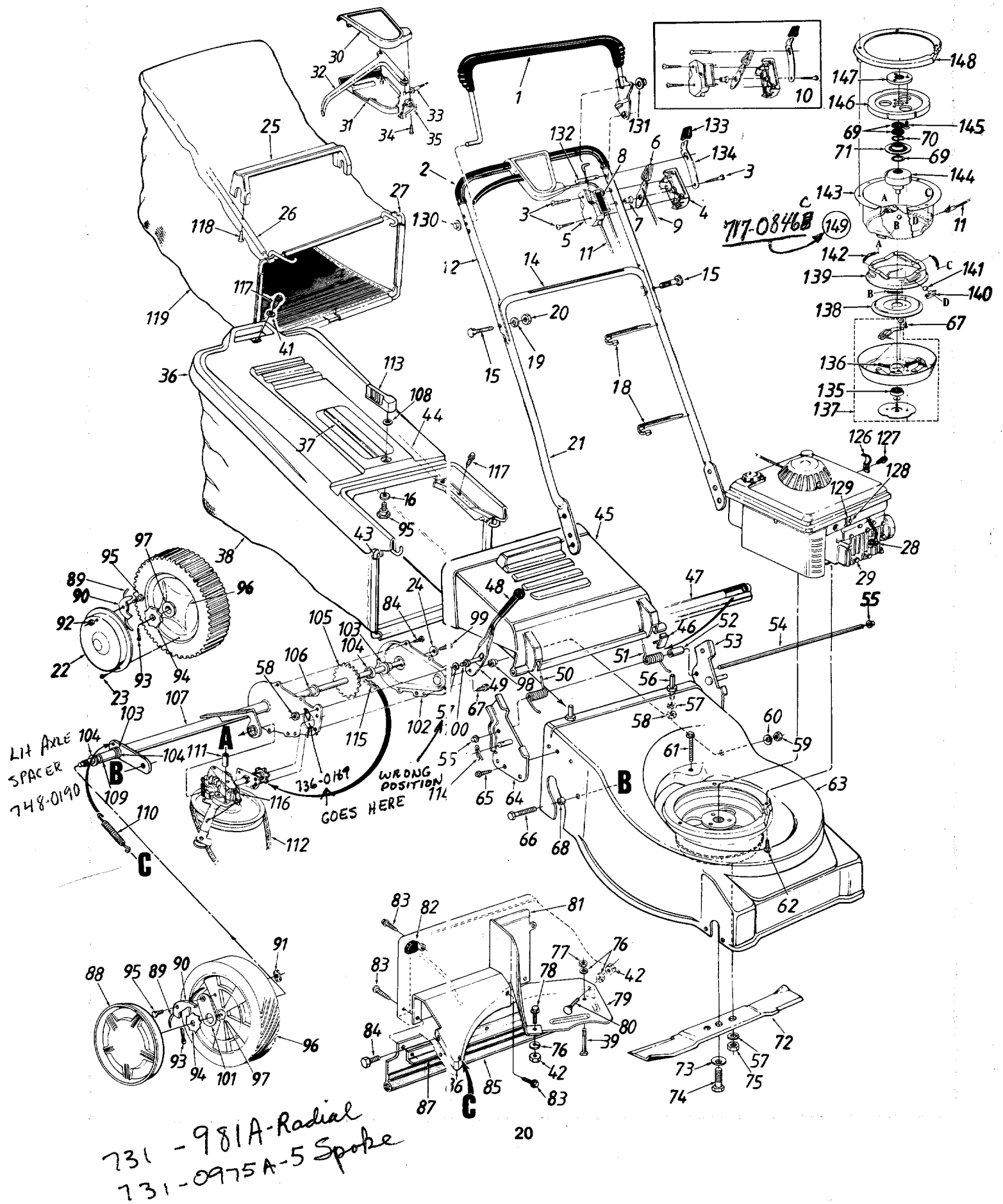
Under normal usage bag material is subject to wear and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag.

NOTES

[Empty rectangular box for notes]

Models 466B and 476B



Models 466B and 476B

PARTS LIST FOR MODELS 466B AND 476B ROTARY MOWERS

REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
1	731-0609		Control Handle Ass'y.	55	726-0106		Cap Speed Nut
2	718-0145		Grip	56	711-0805		Shld. Pin 3/8-24 x 1.43" Lg.
3	710-0796		Truss Mach. B-Tap Scr. #12 x 1.5" Lg.	57	736-0169		L-Wash. 3/8" I.D.*
4	731-0817		Control Panel Half	58	712-0711		Hex Jam Nut 3/8-24 Thd.
5	731-0816		Clutch Panel Half	59	712-0296		Hex L-Nut 3/8-24 Thd.
6	731-0528A	772 N	Throttle Control Lever	60	736-0105		Bell-Wash. .38" I.D. x .88"
7	731-0524		Control Disc Pin	61	710-0778		Hex Wash. Hd. Tap Scr. 1/4-20 x 1.5" Lg.
8	777-5772		Control Label—Throttle	62	710-1007		Hex L-Wash. Hd. Scr. 3/8-16 x 1.5" Lg.
9	746-0672		Throttle Wire—58" Lg. (466B, 476B) <i>YELLOW</i>	63	16997	638	21" Deck Ass'y.
10	753-0431		Control Housing Comp.	64	12296A	N	Handle Brkt. Ass'y.—R.H.
11	746-0407		Control Cable—52" Lg. <i>GREEN</i>	65	710-0892		Hex L-Wash. Hd. AB-Tap Scr. 1/4 x .62" Lg.
12	749-0439A	N	Upper Handle (Painted)	66	710-1006		Hex Wash. Hd. Tap Scr. 3/8-16 x .75" Lg.
	749-0437A	N	Upper Handle (Chrome)	67	710-0599		Hex Wash. Hd. Tap Scr. 1/4-20 x .5" Lg.
14	777-5775		Instruction Label—Handle	68	750-0736		Spacer .383" I.D.
15	710-0671		Curved Carriage Bolt 5/16-18 x 1.38" Lg.	69	736-0409		Serrated Washer 1.0" I.D.
16	736-0286		Bowed Washer	70	736-0408		Wave Washer 1.005" I.D.
18	726-0240		Cable Tie	71	756-0503		Serrated Pulley Half
19	736-0119		L-Wash. 5/16" I.D.*	72	742-0306		21" Blade
20	712-0267		Hex Nut 5/16-18 Thd.*	73	736-0412		Bell-Wash. .46" I.D. x .88"
21	749-0504C	N	Lower Handle (Painted)	74	710-1002		Hex Bolt 7/16-20 x 2.0" Lg. (Gr. 5)
	749-0505C	N	Lower Handle (Chrome)	75	712-0328		Hex Nut 3/8-24 Thd. (Gr. 8)
22	10647		Hub Cap	76	736-0329		L-Wash. 1/4" I.D.*
23	710-0748		Pan Hd. Tap Scr. #12 x .50" Lg. (Used w/Ref. #22)	77	712-0298		Hex Jam Nut 1/4-20 Thd.
24	736-0270		Bell-Wash. .265" I.D. x .75"	78	710-0252		Hex Bolt 1/4-20 x .85" Lg.
25	731-0801		Bag Handlet	79	17013		Rear Belt Baffle
26	749-0764A	N	Rear Catcher Frame†	80	710-0167		Carr. Bolt 1/4-20 x .50" Lg.*
27	747-0700A	N	Front Catcher Frame†	81	17006		Rear Panel Baffle
28	735-0639		Spark Plug Boot (Optional)	82	731-0931		Corner Plug
29	—		Engine	83	710-1017		Torx Mach. AB-Tap Scr. 1/4 x .62" Lg.
30	731-0617A	N	Control Cover Half—Upper	84	710-0352		Hex B-Tap Scr. 1/4 x .38" Lg.
31	731-0618A	N	Control Cover Half—Lower	85	731-0669	0669	Rear Flap
32	731-0620		Control Lever	86	17008		Rear Chute Baffle
33	746-0651		Drive Cable—53" Lg.	87	14847	0981A	Retaining Strip
34	710-0841		Flat C-Sunk Hd. Tap Scr. 5 PER #10 x .75" Lg. UNIT	88	731-0075A	N	Hub Cap
35	731-0619A	N	Cable Mtg. Cap	89	10622B	N	Plastic Spring
36	731-0857A	N	Hardtop Bag Cover††	90	748-0188B	N	Pawl .345" I.D.
37	731-0856		Hardtop Handlet††	91	712-0189		Weld Nut 1/4-20 Thd. (Used w/Ref. #88)
38	764-0252		Grass Bag††	92	712-0324		Hex Ins. L-Nut 1/4-20 Thd. (Used w/Ref. #22)
39	710-0166		Truss Mach. Scr. 1/4-20 x 1.0" Lg.	93	714-0115		Cotter Pin 1/8" Dia.
41	736-0463		Fl-Wash. .281" I.D. x .62"††	94	748-0318		Ratchet Wheel 1.62" O.D.
42	712-0287		Hex Nut 1/4-20 Thd.*	95	738-0137		Shld. Bolt .342" Dia. x .268"
43	747-0693B	N	Front Catcher Frame††	96	**		Wheel Ass'y. Comp.—Rear
44	749-0736B	N	Rear Catcher Frame††	97	**		Flange Ball Bearing 1/2" I.D.
45	731-0859		Chute Deflector	98	750-0624		Shld. Spacer .50" Dia.
46	731-0970A	N	Deflector Plug	99	710-0751		Hex Bolt 1/4-20 x .62" Lg. (Gr. 5)
47	731-0858		Seal—Extrusion	100	711-0805		Shld. Pin 3/8-24 x 1.43" Lg.
48	720-0223		Grip	101	16855		Pawl Plate
49	732-0580		Spring Lever	102	17053A	N	Chain Cover Ass'y.
50	732-0578A	N	Torsion Spring—R.H.	103	741-0324		Hex Flange Brg. .506" I.D.
51	732-0577A	N	Torsion Spring—L.H.	104	736-0160		Fl-Wash. .531" I.D. x .93"
52	750-0566		Spacer .255" I.D.				
53	12297A	N	Handle Brkt. Ass'y.—L.H.				
54	747-0698		Hinge Pin 17.75" Lg.				

Models 466B and 476B

PARTS LIST FOR MODELS 466B AND 476B ROTARY MOWERS (CONTINUED)

REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
105	738-0719A	N	Rear Axle Ass'y.	130	726-0135		Push Cap
106	741-0522		Hex Flange Bearing	131	726-0245		Push Cap
107	17009		Chain Axle Ass'y.	132	731-0607		Lock Pin .314" Dia. x 1.75"
108	736-0498		Internal L-Wash. 1/4" I.D.	133	720-0190		Spring Lever Knob
109	748-0190	11-0313	Spacer .513" I.D.	134	732-0401		Lockout Spring
110	732-0481		Extension Spring 3.8" Lg.	135	741-0124		Ball Brg. .669" I.D. x 1.574"
111	750-0589		Spacer .325" I.D.	136	732-0396		Comp. Spring .35" O.D. x 2.0" Lg.
112	754-0346		V-Belt	137	14300		Clutch Blade Housing Ass'y.
113	720-0224		Grass Catcher Locking Knob	138	14304		Clutch Cone
114	714-0104		Internal Cotter Pin 5/16" Dia.	139	44305-719-0283		Brake Cup Cone
115	713-0353		#48 Chain .50" Pitch x 30 Links	140	731-0520		Ball Block
116	717-0417		Transmission Comp. (See Breakdown)	141	741-0326		Steel Ball .50" Dia.
117	710-0892		Hex L-Wash. Hd. AB Tap Scr. 1/4 x 1.62" Lg.†	142	732-0397		Ext. Spring 1.75" Lg.
118	710-1025		Hex AB-Tap Scr. #12 x 1.25" Lg.†	143	14309		Clutch Housing
119	764-0246		Grass Bag†	144	756-0504		Fixed Pulley Adapter
126	12894A	N	Cable Clamp	145	710-0618		Flat Hd. Tap Scr. 1/4-20 x .625" Lg.
127	710-0429		Hex B-Tap Scr. #10 x 1.8" Lg.	146	748-0319		Flywheel
128	710-0436		Hex B-Tap Scr. #10 x 1.62" Lg.	147	748-0320		Flywheel Adapter
129	751-0463		Cable Clamp	148	17176		Engine Mounting Plate Cover
				149	717-0846B	N	Blade Brake Clutch Ass'y. Comp.

†Model 466B Only.

†Models 476B Only.

NOTE: The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."

Find It Fast
In The
Yellow Pages

CODE: N notates a new part (not previously existing). A three digit number is the color code (use if color or finish is important when ordering parts). See chart below. [i.e., (part no.)-638 for Red Finish].

Color Codes

460—Green Flake	630—Blue
483—Charcoal Grey	635—Grey
498—Yellow	636—White
499—Beige	637—Black
606—Orange	638—Red
629—Silver Flake	640—Green



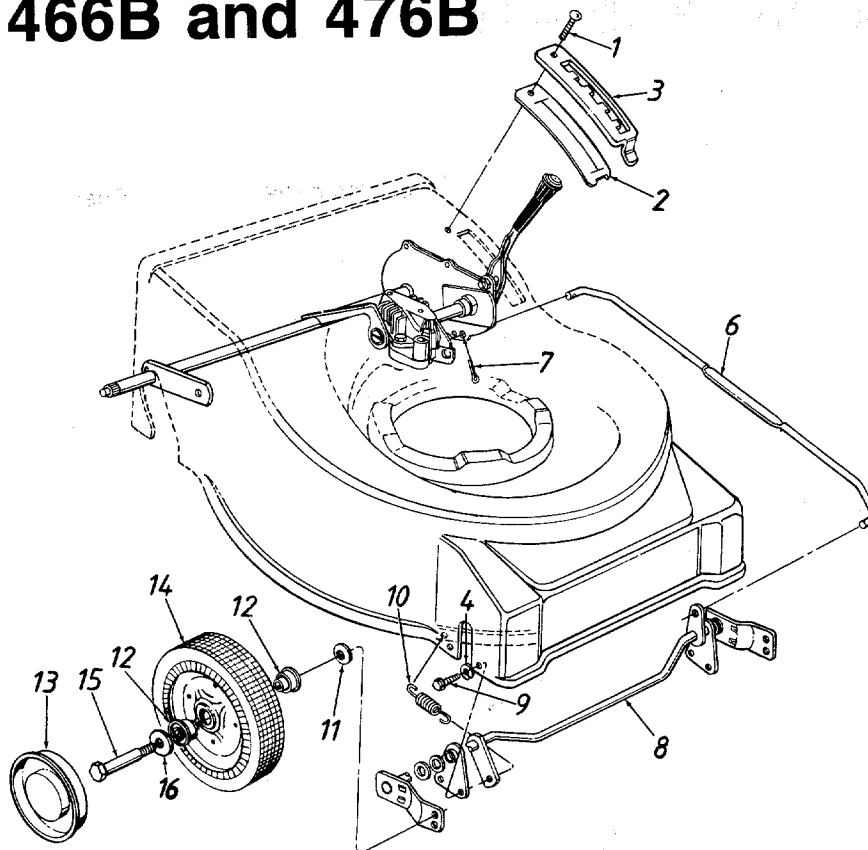
NOTE

This instruction manual covers various models, and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

**REAR WHEEL CHART

Size	Tread Type	Part No.	Bearings
8 x 1.5	"T" Tread	734-1412	741-0180 1/2" I.D. Ball Brg. (2 Req'd.)
8 x 1.75	"T" Tread	734-1260	741-0180 1/2" I.D. Ball Brg. (2 Req'd.)
8 x 2	"S" Wave	734-1510A	741-0486B 1/2" I.D. Sleeve Brg.

Models 466B and 476B



PARTS LIST FOR MODELS 466B AND 476B ROTARY MOWERS

REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
1	710-1017		Torx Mach. AB-Tap Scr. 1/4 x .62" Lg.*	10	732-0589		Extension Spring 2.39" Lg.
2	721-0216		Height Adjustment Support	11	736-0105		Bell-Wash. .380" I.D. x .88" O.D.
3	17323		Height Adjustment Plate	12	741-0180		Flange Ball Bearing 1/2" I.D.
4	736-0329		L-Wash. 1/4" I.D.*	13	—		Hub Cap (See Below)
6	747-0699		Height Adj. Connecting Rod	14	**		Wheel Ass'y. Comp.—Front
7	714-0507		Cotter Pin 3/32" Dia.	15	738-0102		Shld. Bolt .498" Dia. x 1.45"
8	17022		Front Axle Ass'y.	16	736-0160		Fl-Wash. .531" I.D. x .93" O.D.
9	710-0352		Hex L-Wash. Hd. AB-Tap Scr. 1/4 x .38" Lg.				

*For faster service obtain standard nuts, bolts and washers locally.
If these items cannot be obtained locally, order by part number and size as shown on parts list.

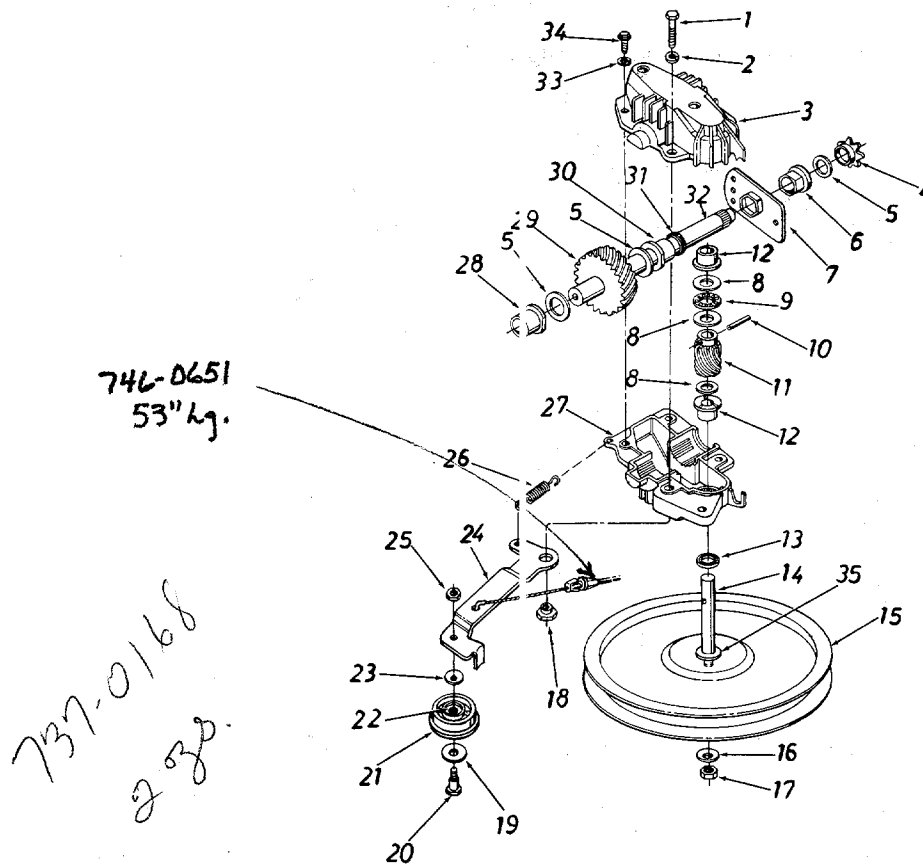
Optional Hub Caps

Color	Part No.
Red	731-0124A
Orange	731-0254A
Black	731-0354A
Grey	731-0355A

**FRONT WHEEL CHART

Size	Tread Type	Part No.
7 x 1.75	"T" Tread	734-1264
8 x 1.5	"T" Tread	734-1412
8 x 1.75	"T" Tread	734-1260
8 x 2	"S" Wave	734-1513A (Use 731-0975A Hub Cap)

Models 466B and 476B



PARTS LIST FOR MODELS 466B AND 476B ROTARY MOWERS

REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
1	710-0106		Hex Bolt 1/4-20 x 1.25" Lg.*	18	738-0440		Shld. Spacer .375" Dia. x .170†
2	736-0329		L-Wash. 1/4" I.D.*	19	736-0344		Fl-Wash. .390" I.D. x 1.0"†
3	717-0418A	N	Upper Hsg. Half	20	738-0691		Shld. Bolt .375" Dia. x .40"†
4	713-0400		#48 Sprocket 7 Tooth x 1/2 Pitch	21	756-0447		Fl-Idler Plastic 1.50" Dia.†
5	736-0336		Fl-Wash. 5/8" I.D. x .030	22	741-0482		Needle Brg. .375" x .31†
6	741-0413		Hex Flange Brg. .631" I.D.	23	736-0270		Bell-Wash. .265" I.D. x .75"†
7	16500A	N	Hex Bearing Cup	24	17052		Idler Brk't. Ass'y.†
8	736-0314		Thrust Wash. .382" I.D. x .70" O.D.	25	712-0138		Hex Patch L-Nut 1/4-28 Thd.†
9	741-0479		Thrust Bearing .375" I.D. x .812" O.D.	26	732-0357		Extension Spring 1.12" Lg.†
10	715-0152		Spring Pin Spir. 1/8" x .62" Heavy	27	717-0419A	N	Lower Hsg. Half
11	717-0420		11 Tooth Helical Gear	28	741-0415		Flange Bearing .566 Dia.
12	748-0208A	N	Flange Bearing	29	717-0422		33 Tooth Helical Gear
13	721-0212		Oil Seal	30	741-0414		Flange Bearing .629 Dia.
14	738-0708B	N	Pulley-Transmission Shaft	31	721-0213		Oil Seal .625 Dia.
15	756-0330		Fl-Pulley 5.06" O.D.†	32	738-0607		Gear Sprocket Shaft
16	736-0270		Bell-Wash. .265" I.D. x .75"†	33	736-0722		L-Wash. #10 I.D.
17	712-0351		Hex L-Nut 1/4-28 L.H. Thd.†	34	710-0436		Hex B-Tap Scr. #10 x .62"
				35	736-0410		Hex Washer .26" x .88"†
					717-0417		Transmission Comp.

†Not Part of Transmission Complete

Trouble Shooting Guide

Trouble	Possible Cause(s)	Corrective Action
Engine fails to start	<ol style="list-style-type: none"> 1. Spark plug wire disconnected. 2. Throttle control lever not in CHOKE position. 3. Fuel shut-off valve closed. 4. Fuel tank empty, or stale fuel. 5. Blocked fuel line. 6. Faulty spark plug. 7. Engine flooded. 	<ol style="list-style-type: none"> 1. Connect wire to spark plug. 2. Move throttle lever to CHOKE position. 3. Open fuel shut-off valve. 4. Fill tank with clean, fresh gasoline. 5. Clean fuel line. 6. Clean, adjust gap or replace. 7. Remove spark plug, dry the plug, and crank engine with plug removed and throttle in off position. Replace spark plug, connect wire and resume starting procedures.
Engine runs erratic	<ol style="list-style-type: none"> 1. Unit running in CHOKE position. 2. Spark plug wire loose. 3. Blocked fuel line or stale fuel. 4. Vent in gas cap plugged. 5. Water or dirt in fuel system. 6. Dirty air cleaner. 7. Carburetor out of adjustment. 	<ol style="list-style-type: none"> 1. Move throttle lever to FAST position. 2. Connect and tighten spark plug wire. 3. Clean fuel line; fill tank with clean, fresh gasoline. 4. Clear vent. 5. Drain fuel tank. Refill with fresh fuel. 6. Clean air cleaner.† 7. Adjust carburetor.†
Engine overheats	<ol style="list-style-type: none"> 1. Engine oil level low. 2. Air flow restricted. 3. Carburetor not adjusted properly. 	<ol style="list-style-type: none"> 1. Fill crankcase with proper oil. 2. Remove blower housing and clean.† 3. Adjust carburetor.†
Occasional skip (hesitates) at high speed	<ol style="list-style-type: none"> 1. Carburetor idle speed too slow. 2. Spark plug gap too close. 3. Carburetor idle mixture adjustment improperly set. 	<ol style="list-style-type: none"> 1. Adjust carburetor.† 2. Adjust gap to .030". 3. Adjust carburetor.†
Idles poorly	<ol style="list-style-type: none"> 1. Spark plug fouled, faulty or gap too wide. 2. Carburetor improperly adjusted. 3. Dirty air cleaner. 	<ol style="list-style-type: none"> 1. Reset gap to .030" or replace spark plug. 2. Adjust carburetor.† 3. Clean air cleaner.†
Excessive vibration	<ol style="list-style-type: none"> 1. Cutting blade loose or unbalanced. 2. Bent cutting blade. 	<ol style="list-style-type: none"> 1. Tighten blade and balance blade. 2. Replace blade.
Mower will not drive	<ol style="list-style-type: none"> 1. Drive clutch cable out of adjustment. 2. Belt worn and/or stretched. 	<ol style="list-style-type: none"> 1. Adjust drive clutch cable (see adjustment section). 2. Replace belt.
Mower will not discharge grass	<ol style="list-style-type: none"> 1. Engine speed too low. 2. Wet grass. 3. Excessively high grass. 	<ol style="list-style-type: none"> 1. Set throttle between 3/4 and full throttle. 2. Do not mow when grass is wet; wait until later to cut. 3. Mow once at a high cutting height, then mow again at desired height or make a narrower cutting swath (1/2 width).
Uneven cut	Dull blade.	Sharpen or replace blade.

†Refer to separate engine manual packed with your unit.

Note: For repairs beyond the minor adjustments listed above, contact your local authorized service dealer.

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service are available through the authorized service firm listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA Auto Electric & Carburetor Co.	BIRMINGHAM 2625 4th Ave. S. Box 246635233	NEW YORK Gamble Dist., Inc.	CARTHAGE West End Ave. Box 38913619
ARKANSAS Sutton's Lawn Mower Shop	NORTH LITTLE ROCK 5301 Roundtop Drive Box 368, Rt. 42117	NORTH CAROLINA Dixie Sales Company	GREENSBORO 335 N. Green Box 140827402
CALIFORNIA Billious	PORTERVILLE 75 North D Street03257	OHIO Stebe's Mid-State Mower Supply	CARROLL Box 366, 71 High St.43112
COLORADO Spitzer Industrial Products Co.	DENVER 6601 N. Washington St.00229	CLEVELAND Bleckrie, Inc.	WADSWORTH 7900 Lorain Ave.44102
FLORIDA Radco Distributors	JACKSONVILLE 4909 Victor St. Box 545902207	NATIONAL CENTRAL National Central	YOUNGSTOWN 1301 Logan Ave. Box 92944501
GEORGIA East Point Cycle & Key Inc.	HIALEAH 7995 W. 26th Court03016	PENNSYLVANIA EECO Inc.	HARRISBURG 4021 N. 6th St.17110
ILLINOIS Keen Edge Co.	EAST POINT 2834 Church St.00344	THOMPSON RUBBER CO. Thompson Rubber Co.	WILLOW GROVE 850 Davisville Rd.19090
INDIANA Parts & Sales Inc.	LYONS 8615 Ogden Ave.00534	BLUEMONT CO. Bluemont Co.	PITTSBURGH 11101 Frankstown Rd.15235
IOWA Power Lawn & Garden Equip.	ELKHART 2101 Industrial Pkwy. Box 27706516	FRANK ROBERTS & SONS Frank Roberts & Sons15767	PUNXSUTAWNEY R.D. 2
LOUISIANA Jourdan Engine Co.	DUBUQUE 2551 J.F. Kennedy2001	SCRANTON AUTO IGNITION CO. Scranton Auto Ignition Co.18509	SCRANTON 1133-35 Wyoming Ave.
MARYLAND Center Supply Co.	LAFAYETTE 214 W. Vermillion St. Box 350370501	TENNESSEE Ace Distributors	KNOXVILLE 2103 Magnolia37917
MASSACHUSETTS Morton B. Collins Co.	TAKOMA PARK 6867 New Hampshire Ave.20912	AMERICAN SALES & SERVICE, INC. American Sales & Service, Inc.38116	MEMPHIS 3035-43 Bellbrook
MICHIGAN Power Equipment Dist.	SPRINGFIELD 300 Birnie Ave.01107	TEXAS Marr Brothers, Inc.	DALLAS 423 E. Jefferson75203
MINNESOTA Hance Distributing Inc.	MOUNT CLEMENS 340 Hubbard48043	ENGINE HOUSE INC. Engine House Inc.	SAN ANTONIO 4918 Golden Quail78249
MISSOURI Oscar Wilson Engine & Parts	PLYMOUTH 12795 16th Ave. North55441	UTAH Powered Products	SALT LAKE CITY 1661 N. Beck St.84116
NEW JERSEY Piersons	EARTH CITY 4159 Shoreline Dr.03045	VIRGINIA RBI Corp.	ASHLAND 101 Cedar Ridge Dr.23005
	KANSAS CITY 3117 Holmes St.04109	WASHINGTON Equip. Northwest98122	SEATTLE 1410 14th Ave.
	ALLOWAY Canal St., Box 49408001	WISCONSIN Wisconsin Magneto Inc.53209	MILWAUKEE 4727 N. Teutonia St.
		PUERTO RICO CIE & Associates, Inc.	AGUADILLA Box 427 Ramey Station00604

WARRANTY PARTS AND SERVICE POLICY

(0588)

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number, Serial Number and/or Data Code of unit involved.
2. Date unit was purchased or first put into service.
3. Date of Failure.
4. Nature of Failure.